Work Order ID 85361

85361

June-06-12 4:23:08 PM

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1* **Cust Item ID:**

Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1* **Customer:**

Reference:

Run Start *NR1*

Approvals: **Process Plan:** MLJ **Date:** 12/06/07 **Tooling:** **Date:** **Stop** *NR2*

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3274	D								
100		0.00							
100	DOCUMENT CONTROL								
DC		**Memo** 0.00							
Document Control		Photocopy bluefile & type labels per PPP D206-642-541	CHG003						

N/A

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Other ☐
- Engineering ☐
- Quality ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Offset/Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unauthorized	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending Passes Below Min
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimp at Bending
- ☐ Inspection Strip in Tube
- ☐ Other
- ☐ Positioned Wrong
- ☐ Ripples on Inner Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

Hardware

- ☐ Breaking
- ☐ Missing
- ☐ Size/Length
- ☐ Spinning
- ☐ Threading
- ☐ Wrong

Drill Holes

- ☐ Misaligned
- ☐ Ovalized
- ☐ Over/Undersized
- ☐ Too Many

General

- ☐ Burrs
- ☐ Contamination
- ☐ Cut Too Short
- ☐ Documentation/Data
- ☐ Finish
- ☐ Inspection Incomplete
- ☐ Inspection Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Jigs/Fixtures/Tooling
- ☐ Kit Incorrect
- ☐ Kit Missing
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Off-Set
- ☐ Orientation Misread
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Lost
- ☐ Part Moved
- ☐ Raw Material
- ☐ Set-up
- ☐ Supplier
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1*
Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00							
110	Skidtubes								
Skidtubes	**Memo**	0.00							
Skidtubes	****VERIFY AND INSPECT THE MATERIAL PRIOR TO USE****								

1- Bend FWD end of tube using bend prog D3274 FWD and foilo 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

DP 12-7-11

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding CF 12-7-13

3- weld fwd cap as per dwg D3274 and QSI004
AR Aluminum Rod Batch: M120164 BE 12-07-16

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

DE 12/07/16

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Prod. Eng. Coor. ☐ Engineering ☐
Machining ☐ Small Fab ☐ Rec/Store/Packaging ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Supplier ☐
Large Fab ☐ Composite ☐ Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Offset/Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unauthorized	☐									

FAULT CATEGORY

Landing Gear

☐ Bending Passes Below Min
☐ Centre Not Concentric to O/S
☐ Cracks
☐ Crushed/Crimp at Bending
☐ Inspection Strip in Tube
☐ Other
☐ Positioned Wrong
☐ Ripples on Inner Bend
☐ Torque Waves in Extrusion
☐ Turning Sequence
☐ Wave/Twist in Tube

Hardware

☐ Breaking
☐ Missing
☐ Size/Length
☐ Spinning
☐ Threading
☐ Wrong

Drill Holes

☐ Misaligned
☐ Ovalized
☐ Over/Undersized
☐ Too Many

General

☐ Burrs
☐ Contamination
☐ Cut Too Short
☐ Documentation/Data
☐ Finish
☐ Inspection Incomplete
☐ Inspection Unqualified
☐ Instructions Incomplete/Unclear
☐ Jigs/Fixtures/Tooling
☐ Kit Incorrect
☐ Kit Missing
☐ Maintenance
☐ Mislabeled
☐ Off-Set
☐ Orientation Misread
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Lost
☐ Part Moved
☐ Raw Material
☐ Set-up
☐ Supplier
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other _____

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Replacement Skidtube
Start Date: 06/06/2012 **Start Qty:** 1.00 *1* **Cust Item ID:**
Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1* **Customer:**
Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** *NR1*
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
114	QC5- Inspect part completeness to step on W/O	0.00							
114									
QC	**Memo**	0.00	DAS 16 9-89						
Quality Control			12/5/16						
116	QC10- Inspect visual per QSI004- ground welds	0.00							
116									
QC	**Memo**	0.00	DAS 16 9-89						
Quality Control			12/5/16						
120	Chemical Conversion Coat per QSI005 4.1	0.00							
120									
HandFinish	**Memo**	0.00				1			
Hand Finishing						TG 12-7-16			

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1*
Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:**
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC7-Inspect Chemical Conversion Coat	0.00							
130									
QC	**Memo**	0.00							
Quality Control									
150		0.00							
150	Skidtubes								
Skidtubes	**Memo**	0.00							
Skidtubes	1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274								
	2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube								
	3-Bond web in place as per Dwg D3274 & QSI 015. A/RSikaflex-291 [illegible] Sikaflex expire date: [illegible] Start: 12/07/17 Time: 10:05 Finish: 12/07/25 Time: 1100 (Adhere for 12 hours)								

DP 12-7-17

M122130
13-4-14

DC 12-7-17

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1*
Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*
Reference:

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC5- Inspect part completeness to step on W/O	0.00							
160									
QC	**Memo**	0.00							
Quality Control									
170		0.00							
170	Skidtubes								
Skidtubes	**Memo**	0.00							
Skidtubes	1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.								
	2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2 OPEN HOLES TO .297" . Deburr								
	3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES) REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES								
	4- Countersink crossbolt spacer holes as per Dwg D3274								
	5- prepare for welding								

DP 12-7-18

-> CF 12-7-18

De 12/07/19

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Replacement Skidtube
Start Date: 06/06/2012 **Start Qty:** 1.00 *1*
Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*
Reference:
Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00 3.0 4.6				1	0	12/07/25	DAS 18 12-09
	Memo	0.00							
190 *190* Skidtubes Skidtubes	Skidtubes	0.00							
	Memo	0.00							

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod
A/RAluminum Rod M122324 BE 12/07/25

3-Grind cross bolt welds flush as per Dwg D3274. → CF 12-7-25

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr. DD 12-7-26

NCR: (Yes) / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: [signature] Date: 12/08/17

QA Closed: MO Date: 12/08/20

Work Order: 85361

Part No. D206-642-541

NCR No. 17-1696

DISPOSITION

Rework	
Scrap	
Use-as-is	X
Work Order Update	

AGAINST DEPARTMENT/PROCESS

Skid-tube	X	Crosstube		Water Jet		Engineering	
Machining		Small Fab		Prod. Eng. Coor.		Quality	
Thermoforming		Finishing		Rec/Store/Packaging		Other	
Large Fab		Composite		Supplier			

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data		12/07/27	# 190.4	x1	Found at inspection that the counter bores are too Deep. measure 0.820-.840 should be 0.75 +.030 -.030 R.C. employee didn't check setting for counter bore correctly. NOA	DAS 12-7-27	Acceptable per Attached Email From CP to DS on July 27th, 2017. See attached.	12-7-27	DAS 16 8-89 12/07/30	DAS 16 8-89 12/4/27
Equip/Tooling	X									
Operator	X									
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

	Bending
	Centre Not Concentric to O/S
	Cracks
	Crushed/Crimped
	Cuffs
	Heat Treat
	Inspection Strip in Tube
	Ripples in Bend
	Torque Waves in Extrusion
	Turning Sequence
	Wave/Twist in Tube

General

	Bend
	BOM/Route
	Broken/Damaged
	Burrs
	Contamination
	Countersink
	Cut Too Short
	Drill Holes
	Drawing
	Finish
	Folio
	Grain
	Hardware
	Inspection Incomplete
	Instructions Incomplete/Unclear
	Maintenance
	Mislabeled
	Misread
	Offset
	Out of Calibration
	Out of Sequence
	Outside Dimensions
	Ovalized
X	Over/Under tolerance
	Part Incorrect
	Part Lost/Missing
	Part Moved
	Positioned Wrong
	Power Loss/Surge
	Pressure/Forced
	Temperature/Cure
	Weld
	Wrong Stock Pulled
	Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Linda Lacelle

From: Chris Provencal <cprovencal@dartaero.com>
Sent: July-27-12 11:15 AM
To: David Shepherd
Cc: psmith@dartaero.com; 'L Lacelle'; 'Isam El-Kassis'; 'Eric Downing'; Mike Petsche
Subject: RE: D206 skids

David,

The affected tubes are several float (-541) and regular tubes (-351). The float holes aren't counterbored and are unaffected. As the crossbolt spacers are not loaded except in bearing by the bushings, the additional length of the counterbore would have no effect on the strength of the crossbolt spacer from regular loading conditions. There would be a small reduction in buckling strength from sideways crushing loads, which doesn't represent a critical loading condition per the FAR requirements.

I will accept these tubes based on that rational. This email is an FYI in case you have an objection.

-Chris

From: Eric Downing [mailto:edowning@dartaero.com]
Sent: Friday, July 27, 2012 8:34 AM
To: 'Provencal, Chris'
Cc: psmith@dartaero.com; 'L Lacelle'; Isam El-Kassis
Subject: D206 skids
Importance: High

Good morning Chris

I need to see you as soon as you read this message I have found the counter bore depth on QTYX9 D206 skids are too deep. I am measuring 0.820"-0.830" and it should be at 0.75+/-0.030". I have 6 in progress and 3 already painted and assembled. What happened was that I had inspected some 206 skids and found that the counter bore was correct but I didn't know that they had changed the counter bore part way through the day and was not set up correctly so I had assumed that they were still the same depth and when I measured the first one today like I do always the depth was not correct at all.

I need to know if this will be acceptable or that we need to rework all the skids.

Thanks
Eric Downing
QC Corrdinator
Dart Aerospace LTD

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric to O/S
☐ Cracks
☐ Crushed/Crimped
☐ Cuffs
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Ripples in Bend
☐ Torque Waves in Extrusion
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damaged
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drill Holes
☐ Drawing
☐ Finish
☐ Folio

☐ Grain
☐ Hardware
☐ Inspection Incomplete
☐ Instructions Incomplete/Unclear
☐ Maintenance
☐ Mislabeled
☐ Misread
☐ Offset
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions

☐ Ovalized
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
_____
_____

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Replacement Skidtube
Start Date: 06/06/2012 **Start Qty:** 1.00 *1*
Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*
Reference:
Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00	DAS 16 9-89						
	Memo	0.00	12/4/30						
210 *210* QC Quality Control	QC10- Inspect visual per QSI004- ground welds	0.00	DAS 16 9-89			FW			
	Memo	0.00	12/4/30						
220 *220* HandFinish Hand Finishing	Pressure Wash per QSI005 4.3	0.00				1	JB	12-7-30	
	Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch	0.00							

Work Order ID 85361

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85361

Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1*

Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
230						1X			ML
Powdercoat	**Memo**	0.00							12/07/30
Powder Coating	START TIME: 2:00								
W121841	OVEN TEMPERATURE: 320°F								
	FINISH TIME: 2:30								
240	QC3- Inspect Part Finish	0.00							
240						1	0	2P	12/08/01
QC	**Memo**	0.00							
Quality Control									
250		0.00							
250	HandFinishing					1	0	2P	12/08/01
HandFinish	**Memo**	0.00							
Hand Finishing	1-Install Nut Plate as per Dwg D3274. Apply LPS-PROCYON to Nut Plate and rivets. A/RN/ALPS-PROCYON 114596								
	2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a A/RSikaflex-291 12213 Sikaflex expire date: 14/03								

Work Order ID 85361

85361

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Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1*

Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC5- Inspect part completeness to step on W/O	0.00							
260									
QC	**Memo**	0.00							
Quality Control	Inspect Nut Plate & Inserts								
270		0.00							
270	HAND FINISHING RESOURCE #1								
HandFinish	**Memo**	0.00							
Hand Finishing	1-Install wearpads & gaskets as per Dwg D3274.								

DAS 16 9-89 12/4/01

1 8 12/08/01

2-Install ring as per Dwg D3274
A/RSikaflex-291 122130
Sikaflex expire date: 14/03

3-Inspect for foreign objects as per QSI 024

4-Spray inside of tube on both sides of web with LPS-3
A/R LPS-3 Batch: N/A

5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.
A/RSikaflex-291 122130
Sikaflex expire date: 14/03

Procyon 114596

Work Order ID 85361

85361

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Item ID: D206-642-541 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Start Qty:** 1.00 *1*

Required Date: 15/06/2012 **Req'd Qty:** 1.00 *1*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280 *280* QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo**	0.00 0.00							
290 *290* Packaging Packaging	Identify as per dwg & Stock Location:_____ **Memo**	0.00 0.00	88741				12/8/16		
300 *300* QC Quality Control	QC21- Final Inspection - Work Order Release **Memo**	0.00 0.00					12/8/16		

NLJ 12/08/14

Picklist Print

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9

Work Order ID: 85361

85361

Parent Item: D206-642-541

D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

Comments:
IPP Rev:B05.09.23Revised per D206-642 Rev. JKJ/JLM
IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM
IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD
IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC
IPP Rev:F 08-06-02 add comment DD verified by:EC
IPP Rev:G 08-10-09 revise details DD verified byEC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-1-190		Manufactured	No			110	Each	106.0000	1	1			
D2600-1-190									**	DC 12/07/11			
Extrusion Round 3" 206													

Location	Loc Qty	Loc Code	
HALL	45		
69622	45		
LG	61		
76912	61		(1)

D3285-1		Manufactured	No			110	Each	42.0000	1	1			
D3285-1									**				BE 12-07-16
Cap													

Location	Loc Qty	Loc Code	
LG002	42		
52511	1		
52647	41		1

D3282-041		Manufactured	No			150	Each	9.0000	1	1			
D3282-041									**	DC 12/07/17			
Float Web (206L/407)													

Location	Loc Qty	Loc Code	
LG	9		
82651	9		(1)

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Other ☐
- Engineering ☐
- Quality ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Offset/Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unauthorized	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending Passes Below Min
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimp at Bending
- ☐ Inspection Strip in Tube
- ☐ Other
- ☐ Positioned Wrong
- ☐ Ripples on Inner Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

Hardware

- ☐ Breaking
- ☐ Missing
- ☐ Size/Length
- ☐ Spinning
- ☐ Threading
- ☐ Wrong

Drill Holes

- ☐ Misaligned
- ☐ Ovalized
- ☐ Over/Undersized
- ☐ Too Many

General

- ☐ Burrs
- ☐ Contamination
- ☐ Cut Too Short
- ☐ Documentation/Data
- ☐ Finish
- ☐ Inspection Incomplete
- ☐ Inspection Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Jigs/Fixtures/Tooling
- ☐ Kit Incorrect
- ☐ Kit Missing
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Off-Set
- ☐ Orientation Misread
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Lost
- ☐ Part Moved
- ☐ Raw Material
- ☐ Set-up
- ☐ Supplier
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

June-06-12 4:23:12 PM

Work Order ID: 85361 *85361*

Parent Item: D206-642-541 *D206-642-541*

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

D2649	Manufactured	No		190	Each	379.0000	12	12

D2649

Cross Bolt Spacer

**

BE 12/07/25
B 86912 x12

Location	Loc Qty	Loc Code	
LG	236		
77574	2		
79502	8		
79503	215		
79564	4		
79565	7		
LG001	143		
65317	1		
68224	2		
68507	11		
71355	2		
72704	2		
72841	11		
73390	8		
73857	21		
73858	53		
73859	4		
73860	4		
78020	6		
78583	2		
79566	16		

D3275-1	Manufactured	No		190	Each	65.0000	12	12

D3275-1

Crossbolt Spacer

**

BE 12/07/25
B 85418 x12

Location	Loc Qty	Loc Code	
LG002	65		
66930	1		
83264	64		

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Other ☐
- Engineering ☐
- Quality ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Offset/Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unauthorized	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending Passes Below Min
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimp at Bending
- ☐ Inspection Strip in Tube
- ☐ Other
- ☐ Positioned Wrong
- ☐ Ripples on Inner Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

Hardware

- ☐ Breaking
- ☐ Missing
- ☐ Size/Length
- ☐ Spinning
- ☐ Threading
- ☐ Wrong

Drill Holes

- ☐ Misaligned
- ☐ Ovalized
- ☐ Over/Undersized
- ☐ Too Many

General

- ☐ Burrs
- ☐ Contamination
- ☐ Cut Too Short
- ☐ Documentation/Data
- ☐ Finish
- ☐ Inspection Incomplete
- ☐ Inspection Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Jigs/Fixtures/Tooling
- ☐ Kit Incorrect
- ☐ Kit Missing
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Off-Set
- ☐ Orientation Misread
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Lost
- ☐ Part Moved
- ☐ Raw Material
- ☐ Set-up
- ☐ Supplier
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

June-06-12 4:23:12 PM

Work Order ID: 85361 *85361*

Parent Item: D206-642-541 *D206-642-541*

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

CR3212-4-03	Purchased	No		250	Each	1,276.000	2	2	
CR3212-4-03						**	2	QP	12/08/01
Cherry Rivet									

Location		Loc Qty	Loc Code
FP002		348	
	114859 ✓	348	
ST331		928	
	110139	2	
	119017	926	

D3415-041	Manufactured	No		250	Each	32.0000	1	1	
D3415-041						**	1	QP	12/08/01
Nut Plate									

Location		Loc Qty	Loc Code
ST042		32	
	67605	1	
	82151 ✓	31	

CCR264SS3-3	Purchased	No		250	Each	346.0000	2	2	
CCR264SS3-3						**	2	QP	12/08/01
Cherry Rivet									

Location		Loc Qty	Loc Code
ST331		346	
	113973	2	
	117849 ✓	79	
	119017	265	

Work Order ID: 85361 *85361*
Parent Item: D206-642-541 *D206-642-541*
Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012
Start Qty: 1.00 **Required Qty:** 1.00

ALS4-1032-130	Purchased	No		250	Each	2,185.000	78	78	
ALS4-1032-130							**	78	12/08/01
Insert									

Location	Loc Qty	Loc Code
ST280 122474	205	
119084	116	
120671	89	
ST281	74	
120807	36	
120837	38	
ST282	1906	
121269	1906	

D3536-15	Manufactured	No		270	Each	6.0000	1	1	
D3536-15							**	1	12/08/01
Gasket									

Location	Loc Qty	Loc Code
FP002 85604	6	
73318	4	
81343	2	

D3536-23	Manufactured	No		270	Each	4.0000	1	1	
D3536-23							**	1	12/08/01
Gasket									

Location	Loc Qty	Loc Code
FP002	4	
74510	1	
83377	3	
85295		

Picklist Print

June-06-12 4:23:13 PM

Work Order ID: 85361 *85361*

Parent Item: D206-642-541 *D206-642-541*

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

D3536-35	Manufactured	No		270	Each	16.0000	1	1	
D3536-35							**	1	12/08/01
Gasket									

Location		Loc Qty	Loc Code
FP002	85605 ✓	16	
	81340	5	
	82065	11	

D3536-39	Manufactured	No		270	Each	10.0000	1	1	
D3536-39							**	1	12/08/01
Gasket									

Location		Loc Qty	Loc Code
FP		9	
	82252 ✓	9	
FP002		1	
	73317	1	

D3535-15	Manufactured	No		270	Each	3.0000	1	1	
D3535-15							**	1	12/08/01
Wearshoe									

Location		Loc Qty	Loc Code
FP001		3	
	80328	1	
	81354	2	
	85291 ✓		

Work Order ID: 85361 *85361*
Parent Item: D206-642-541 *D206-642-541*
Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012
Start Qty: 1.00 **Required Qty:** 1.00

D3535-35	Manufactured	No		270	Each	29.0000	1	1

D3535-35 **
Wearshoe

1 12/08/01

Location	Loc Qty	Loc Code
FP001	29	
67598	1	
70815	1	
78873	13	
79849	1	
82064	1	
83638 ✓	12	

D3535-39	Manufactured	No		270	Each	22.0000	1	1

D3535-39 **
Wearshoe

1 12/08/01

Location	Loc Qty	Loc Code
FP001	22	
69759	1	
74513	3	
81359 ✓	18	

D3535-23	Manufactured	No		270	Each	9.0000	1	1

D3535-23 **
Wearshoe

1 12/08/01

Location	Loc Qty	Loc Code
FP001	9	
81355	1	
83375	8	

85256 ✓

Picklist Print

June-06-12 4:23:13 PM

Work Order ID: 85361 *85361*

Parent Item: D206-642-541 *D206-642-541*

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

D3537-3	Manufactured	No		270	Each	8.0000	1	1	
D3537-3							**	1 SP	12/08/01
Wearpad									

Location	Loc Qty	Loc Code
FP002 85481	8	
78836	2	
81363	6	

D3537-1	Manufactured	No		270	Each	28.0000	9	9	
D3537-1							**	9 SP	12/08/01
Wearpad								1	

Location	Loc Qty	Loc Code
FP002 86238	28	
81362	15	
83254	1	
83255	3	
84091	9	

AN960C10L	* NAS1149C0332R	Purchased	No	85458	270	Each	0.0000	80	80
*AN960C10L *								**	80 SP 12/08/01
washer									
AN960C416	* NAS1149C0463R	Purchased	No	122063	270	Each	0.0000	1	1
AN960C416								**	1 SP 12/08/01
washer									

119097

Picklist Print

June-06-12 4:23:13 PM

Work Order ID: 85361 *85361*

Parent Item: D206-642-541 *D206-642-541*

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

D3672-1	Manufactured	No		270	Each	1,040.000	2	2	
D3672-1							**	2	12/08/01
Phenolic Washer									

Location		Loc Qty	Loc Code
ST060		1040	
	72229	4	
	76277	36	
	80369 ✓	500	
	83608	500	

AN3C4A	Purchased	No		270	Each	1,262.000	80	80	
AN3C4A							**	80	12/08/01
BOLT									

Location		Loc Qty	Loc Code
ST350	122151 ✓	1262	
	120187	57	
	120521	28	
	120769	38	
	121205	900	
	121556	239	

AN4C5A	Purchased	No		270	Each	195.0000	1	1	
AN4C5A							**	1	12/08/01
BOLT									

Location		Loc Qty	Loc Code
ST355		195	
	112243	136	
	119017 ✓	59	

Picklist Print

June-06-12 4:23:13 PM

Work Order ID: 85361 *85361*

Parent Item: D206-642-541 *D206-642-541*

Parent Item Name: Replacement Skidtube

Start Date: 06/06/2012 **Required Date:** 15/06/2012

Start Qty: 1.00 **Required Qty:** 1.00

D2646	Manufactured	No		270	Each	65.0000	1	1

D2646

Aft Cap

** 1 2P 12/08/01

Location	Loc Qty	Loc Code	
FP002 85443✓	65		
62678	5		
68280	5		
70945	1		
71070	2		
73294	1		
73825	2		
78018	1		
79562	10		
81974	38		

D3413-1	Manufactured	No		270	Each	69.0000	1	1

D3413-1

Ring

** 1 2P 12/08/01

Location	Loc Qty	Loc Code	
ST420	4		
79233	4		
ST464	65		
76754	1		
80224	4		
83307	40		
83867	20		

87253✓

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
CP	PH	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO. / REV.
		D3274 / D
DATE		TITLE / SCALE
06.12.19		SKIDTUBE ASSEMBLY / NTS

A	04.03.15	NEW ISSUE
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76
C	05.03.16	ADD –043; NEW INSERTS
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET

RELEASED
07.02.12
DEO ATTACHED

Qty -041	Qty -043	Part Number	Description
X		**D3274-041**	**SKIDTUBE ASSEMBLY**
	X	**D3274-043**	**SKIDTUBE ASSEMBLY**
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

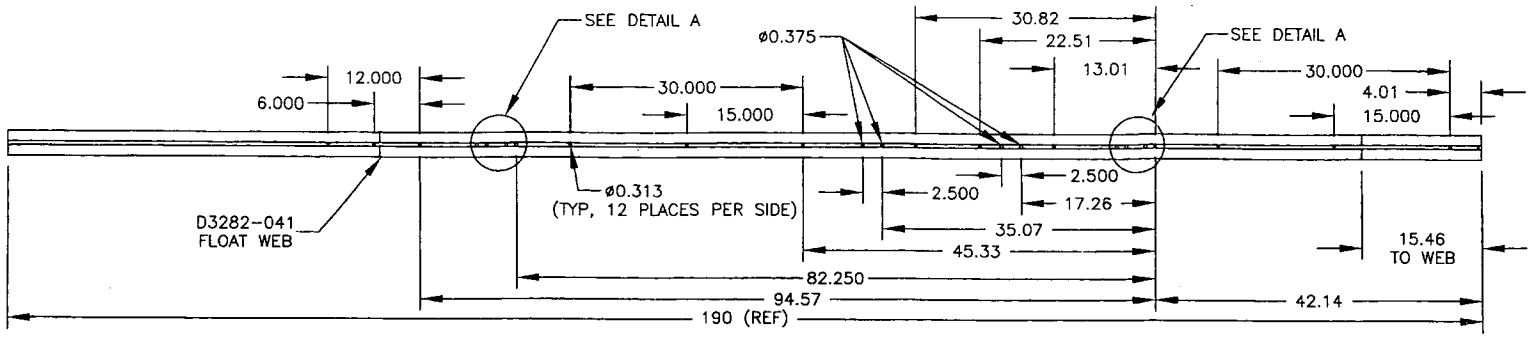
GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
   THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
   - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

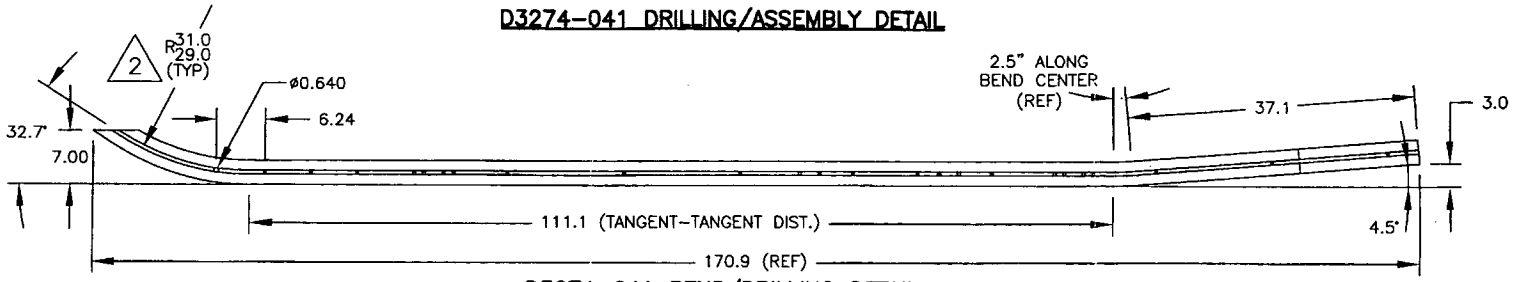
UNCONTROLLED COPY
SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER NO. 85361 12/06/24 MLS
SHOP COPY
RETURN TO ENGINEERING

85361

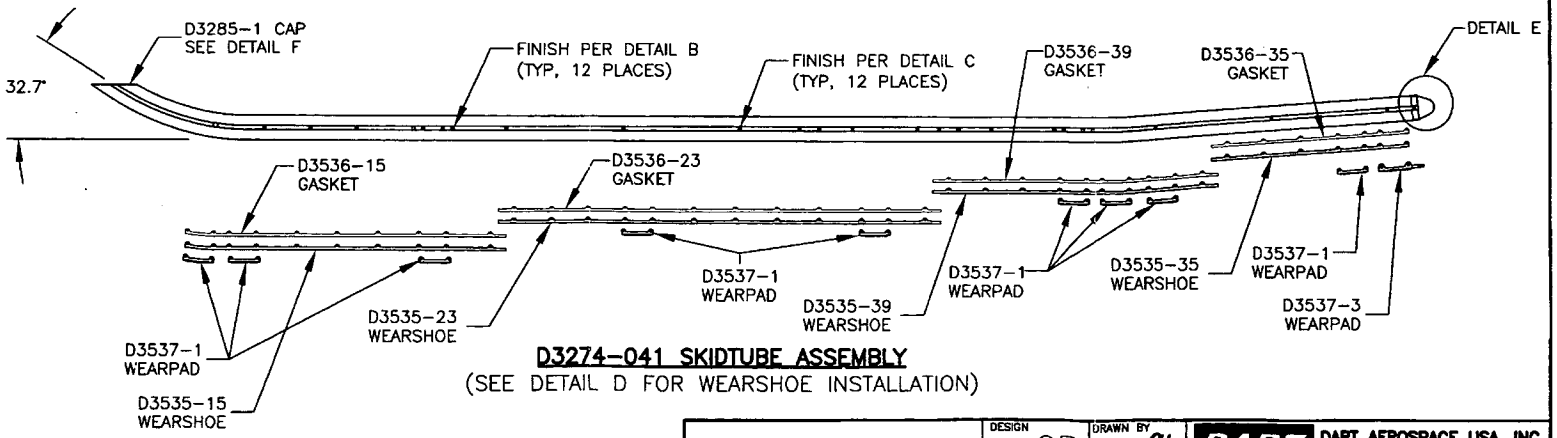
DEO ATTACHED



D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



D3274-041 SKIDTUBE ASSEMBLY

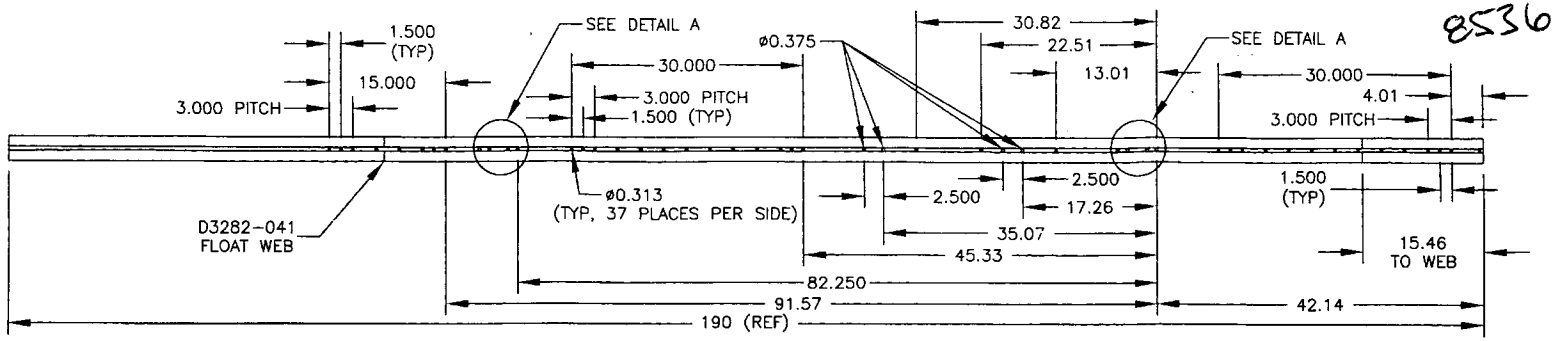
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED
07.02.12

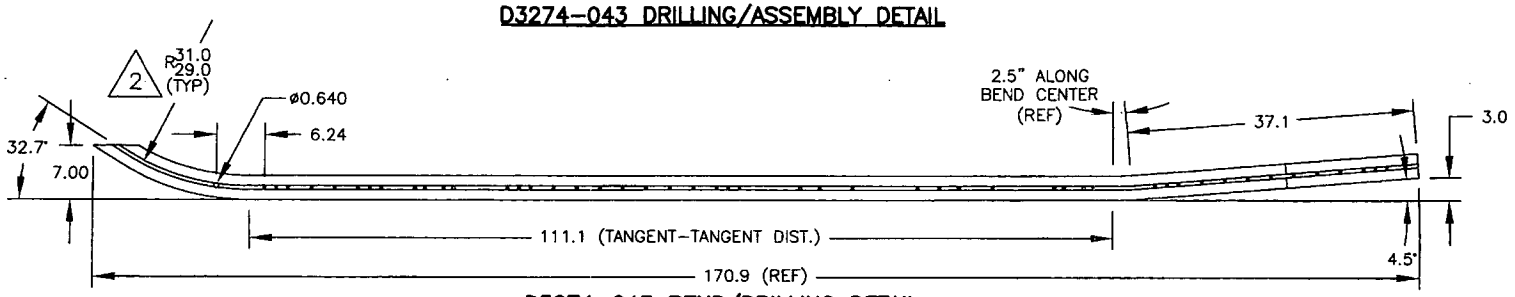
DESIGN	DRAWN BY	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CP	PH	
CHECKED	APPROVED	DRAWING NO. D3274 — REV. D — SHEET 2 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY — SCALE 1:15

DÉO ATTACHED

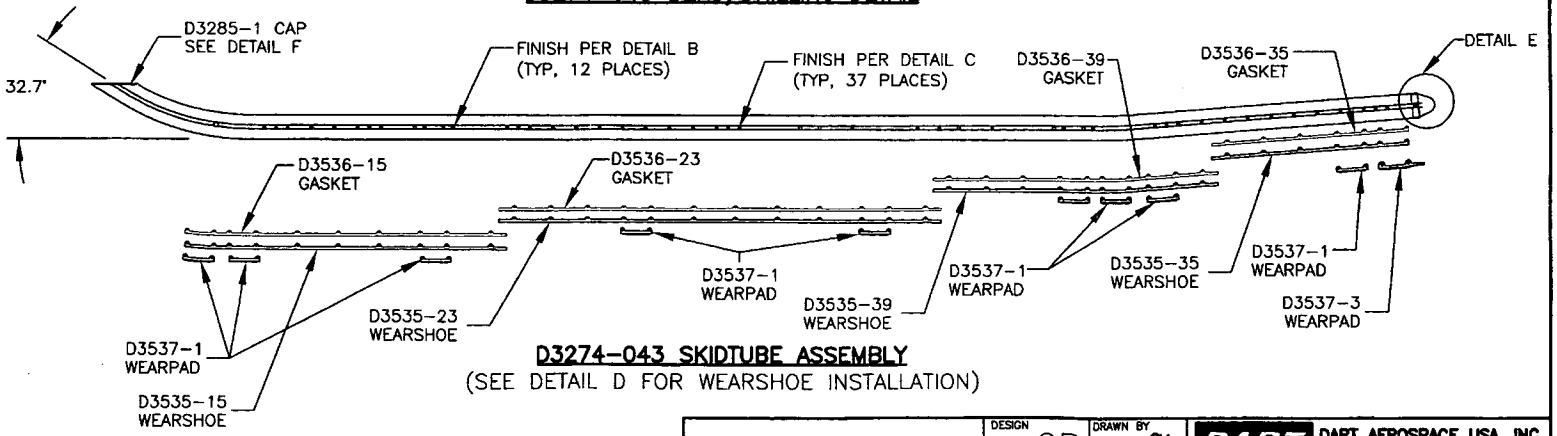
853161



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY

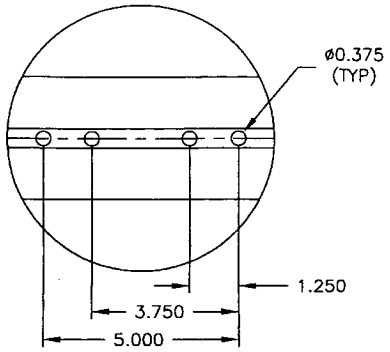
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED
07.02.12

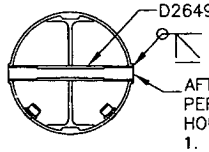
DESIGN	DRAWN BY	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CP	PH	
CHECKED	APPROVED	DRAWING NO. D3274 — REV. D — SHEET 3 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY — SCALE 1:15

05361

DETAIL A: DRILL DETAIL

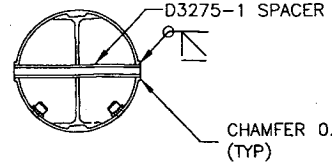


DETAIL B
FOR ø0.375 HOLES ONLY

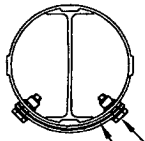


AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE TO ø0.313x0.75 DEEP

DETAIL C
FOR ø0.313 HOLES ONLY



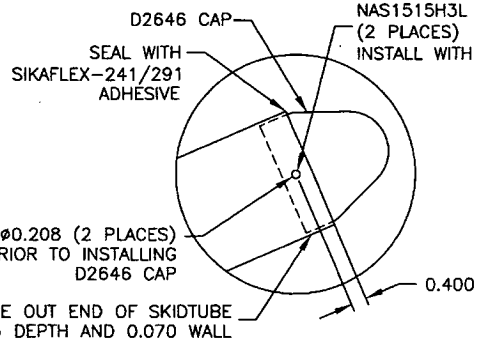
DETAIL D



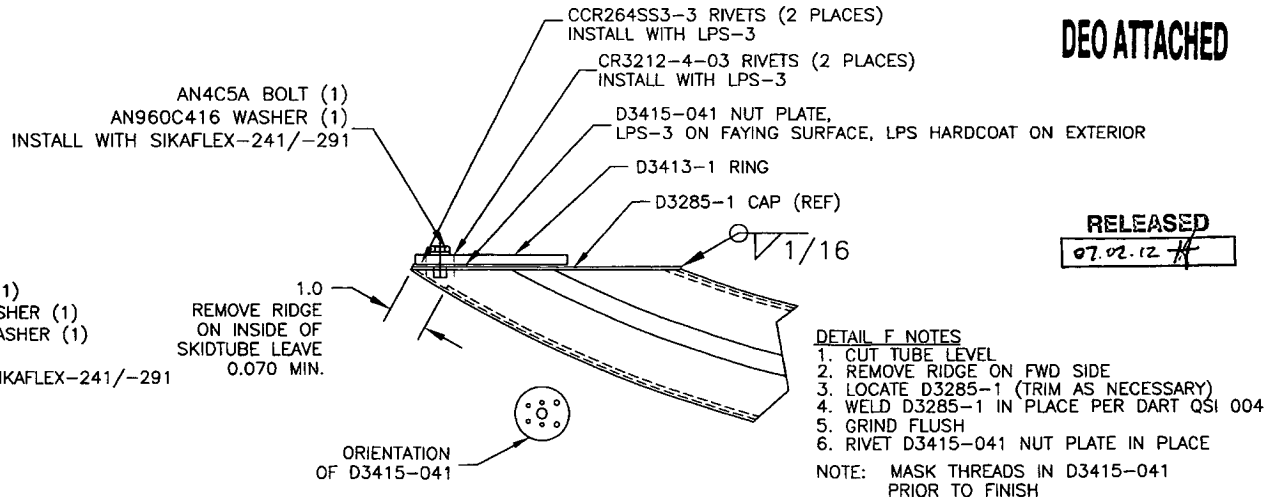
ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(78 PLACES)

GASKET/WEARSHOE/WEARPAD (REF)

DETAIL E



DETAIL F: END FINISHING DETAIL



DEO ATTACHED

RELEASED
07.02.12

DETAIL F NOTES
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

DESIGN	DRAWN BY	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CP	PH	
CHECKED	APPROVED	DRAWING NO. D3274 — REV. D
		SHEET 4 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY — SCALE 1:3

95361

DRAWING NO.	TITLE	REV.	DART AEROSPACE USA, INC	D.E.O. NO.	SHEET NO.	SCALE
D3274	SKIDTUBE ASSEMBLY	D	ENGINEERING ORDER	D3274-D-1	SHEET 1 OF 1	NTS

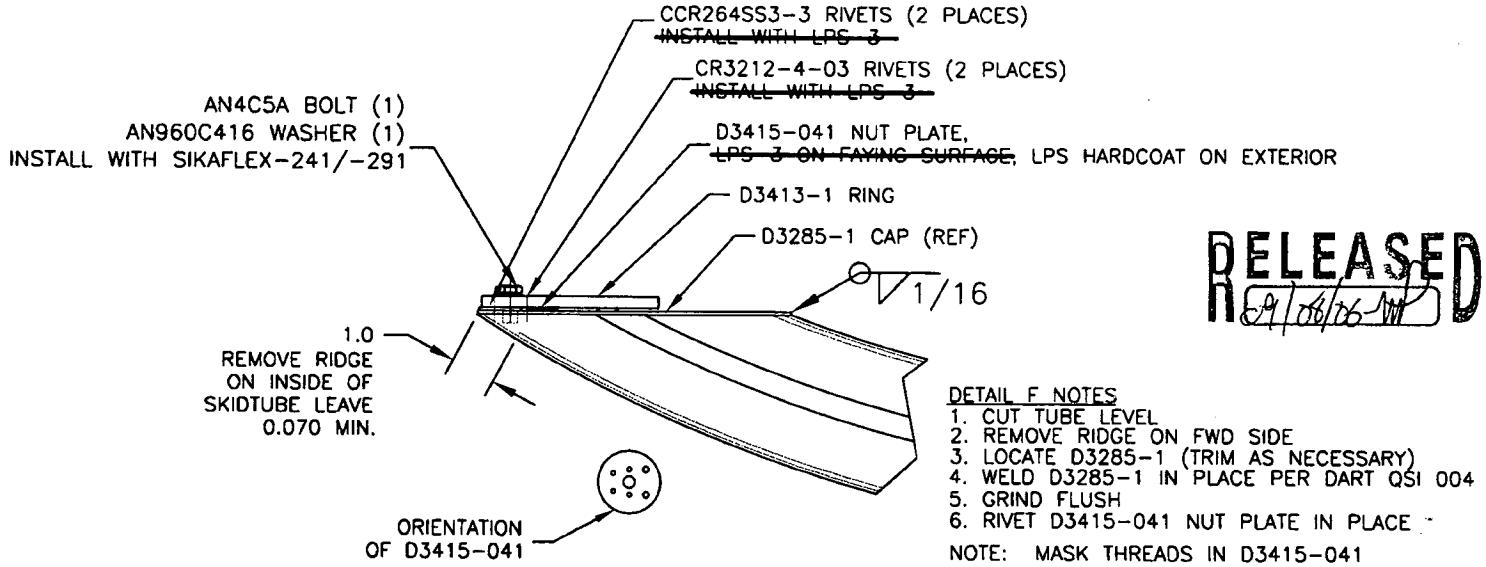
DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

DETAIL F: END FINISHING DETAIL



RELEASED
09/06/23

DETAIL F NOTES
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041 PRIOR TO FINISH

NO. 299

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job #: B85361
Part #: A206-642-541
Description: Skid
Welding Process: Tig[✓] Mig[ ]
Base materiel: Alum.
Current: AC[ ] DC[✓]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[✓]	fail[ ]
Incomplete Penetration:	pass[✓]	fail[ ]
Incomplete Fusion:	pass[✓]	fail[ ]
Cracks:	pass[✓]	fail[ ]
Overlap (cold lap)	pass[✓]	fail[ ]
Undercut:	pass[✓]	fail[ ]
Pin holes:	pass[✓]	fail[ ]
Porosity (surface):	pass[✓]	fail[ ]
Coloration:	pass[✓]	fail[ ]
Burn through:	pass[✓]	fail[ ]

Qualifier David Lewis **Date of Test Coupon** 12.07.26

Welder Barclay Elliott **Date of Test Coupon** 12-07-26

The above named individual is qualified in accordance with AWS D17.1.2001 to weld